

**What Is Claimed Is:**

- 1        1. A method for dynamic gamma adjustment of an LCD having  
2        a data driver and a gate driver, comprising the following steps:  
3                detecting a brightness data of a data signal provided by  
4                the data driver; and  
5                providing a gamma signal according to the brightness data  
6                to the data driver.
- 1        2. The method as claimed in claim 1, wherein the  
2        brightness data represents a gray-level distribution of a single  
3        frame.
- 1        3. The method as claimed in claim 1, wherein the  
2        brightness data represents an average gray-level distribution  
3        of a plurality of frames.
- 1        4. The method as claimed in claim 1, wherein the gamma  
2        signal enhances the brightness resolution of a low gray level  
3        when the brightness data belongs to a low gray level.
- 1        5. The method as claimed in claim 1, wherein the gamma  
2        signal enhances the brightness resolution of a high gray level  
3        when the brightness data belongs to a high gray level.
- 1        6. The method as claimed in claim 1, wherein the gamma  
2        signal adjusts a voltage level of the data signal presenting a  
3        predetermined gray level.
- 1        7. The method as claimed in claim 1, wherein the data  
2        signal is a digital signal.

1       8. A circuit for dynamic gamma adjustment of an LCD  
2 having a data driver and a gate driver, comprising:  
3            a brightness sampling circuit for detecting a brightness  
4              data of a data signal provided by the data driver;  
5            a brightness classifying circuit for classifying the  
6              brightness data into a predetermined brightness  
7              group; and  
8            a gamma decision circuit for providing a predetermined  
9              gamma signal of the predetermined brightness group  
10             to the data driver.

1       9. The circuit as claimed in claim 8, wherein the data  
2 signal is a digital signal.

1       10. The circuit as claimed in claim 9, wherein the  
2 brightness sampling circuit obtains the brightness data by  
3 analyzing the digital signal.

1       11. The circuit as claimed in claim 8, wherein the  
2 brightness data represents a gray-level distribution of a single  
3 frame.

1       12. The circuit as claimed in claim 8, wherein the  
2 brightness data represents an average gray-level distribution  
3 of a plurality of frames.

1       13. The circuit as claimed in claim 8, wherein the gamma  
2 signal output by the gamma decision circuit enhances the  
3 brightness resolution of a low gray level when the brightness  
4 data belongs to a low gray level.

1       14. The circuit as claimed in claim 8, wherein the gamma  
2 signal output by the gamma decision circuit enhances the  
3 brightness resolution of a high gray level when the brightness  
4 data belongs to a high gray level.

1       15. The circuit as claimed in claim 8, wherein the gamma  
2 signal output by the gamma decision circuit adjusts a voltage  
3 level of the data signal presenting a predetermined gray level.